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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,194	11/13/2001	Christian Engeler	015258-055600US	4424
20350	7590 09/02/2004		EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR			LANGEL, WAYNE A	
			ART UNIT	PAPER NUMBER
SAN FRANC	CISCO, CA 94111-383	34	1754	
			DATE MAILED, 00/02/2004	•

Please find below and/or attached an Office communication concerning this application or proceeding.



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

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SERIAL NUMBER | FILING DATE |

FIRST NAMED INVENTOR ATTORNEY DOCKET NO.

1003 41194		
	EXAMINER	
	ART UNIT PAPE	R NUMBER
This is a communication from the examiner in charge of your application.	DATE MAILED:	
COMMISSIONER OF PATENTS AND TRADEMARKS		
This application has been examined Responsive to communication filed of	n This ac	tion is made final.
Failure to respond within the period for response will cause the application to become a	nth(s),daws from the date of the bandoned. 35 U.S.C. 133	his letter.
Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:		
 Notice of References Cited by Examiner, PTO-892. Notice of Art Cited by Applicant, PTO-1449. Information on How to Effect Drawing Changes, PTO-1474. 	Notice of Draftsman's Patent Drawing R Notice of Informal Patent Application, P	
Part II SUMMARY OF ACTION		
1. Claims	are pending in	n the application.
Of the above, claims	are withdrawn from	n consideration.
2. Claims	have been car	ncelled.
3. Claims	are allowed.	
4. Claims	are rejected.	
5. Claims	are objected	to.
6. Claims /-/0	are subject to restriction or election re	quirement.
7. This application has been filed with informal drawings under 37 C.F.R. 1.85 which	ch are acceptable for examination purposes	S.
8. Formal drawings are required in response to this Office action.		
9. The corrected or substitute drawings have been received on are acceptable; and acceptable (see explanation or Notice of Draftsman's	. Under 37 C.F.R. 1.84 these Patent Drawing Review, PTO-948).	drawings
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed onexaminer; ☐ disapproved by the examiner (see explanation).	has (have) been	the
11. The proposed drawing correction, filed, has been	approved; D disapproved (see explanation	ո).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The ce ☐ been filed in parent application, serial no; filed on	riffed coay has Theon received. These	
13. Since this application apppears to be in condition for allowance except for formal accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213	matters, prosecution as to the merits is clo 3.	sed in
14 Other		

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

- I. Claims 2-8, drawn to an isotope exchange column, classified in Class 422, subclass 211.
- II. Claim 9, drawn to a method for the de-enrichment of tritium from heavy water, classified in Class 423, subclass 644.
- III. Claim 10, drawn to a method for forming heavy water, classified in Class 423, subclass 580.2.

Claim 1 link(s) inventions I, II and III. The restriction requirement among the linked inventions is subject to the non-allowance of the linking claim(s), claim 1. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. § 121 are no longer

applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the process as claimed can be used to practice another and materially different process, such as a process for forming heavy water.

Inventions I and III are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process, such as one for the de-enrichment of tritium from heavy water.

Inventions II and III are unrelated. Inventions are

unrelated if it can be shown that they are not disclosed as capable of use together, or they have different modes of operation, or they have different functions, or they have different effects. (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions, i.e., the de-enrichment of tritium from heavy water versus the production of heavy water.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classifications, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must

be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wayne A. Langel whose telephone number is (571) 272-1353. The examiner can normally be reached on Monday through Friday from 8 A.M. to 3:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on (571) 272-1358. The fax phone number for this Group is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit 1754

August 30, 2004

MAYNE A. LANGEL
WAYNE A. LANGEL
PRIMARY EXAMINER